



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

KANAO

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Serial No. 09/893,422

Group: 2879

Filed: June 29, 2001

Examiner: Leurig, S.

For: A SPARK PLUG FOR AN ENGINE FOR A COGENERATION SYSTEM

\* \* \* \* \*

October 20, 2003 (Monday)  
(October 18 = Saturday)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**AMENDMENT/RESPONSE**

Responsive to the final Office Action dated June 18, 2003, please enter the following amendments and consider the following remarks. A Request for Continued Examination (RCE) is being concurrently filed herewith.

OK  
for  
entry

SL 11/5/03

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TC 280J MAIL ROOM

Ir and at least one of Rh, Pt, Ru, Pd, and W.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The object and features of the present invention will become more readily apparent from the following detailed description taken  
5 in conjunction with the accompanying drawings in which:

Fig. 1 shows a side elevation view, partly in cross section, of a side electrode type of spark plug according to the invention;

Fig. 2A shows an enlarge side elevational view in cross section of a spark discharging portion;

10 Fig. 2 B shows a section taken on line B-B in Fig. 2A;

Fig. 3A shows a plan view of another example of the first discharge member;

Fig. 3B is a sectional side elevational view taken on the line C-C in Fig. 3A;

15 Figs. 4A and 4B are cross-sectional plan views of examples of the first and second discharge members;

Fig. 5 is a graphical drawing showing the relation between the discharge width T and the gap G with the width D being varied;

Fig. 6 is a graphical drawing showing the relation between the  
20 shortest distance L (mm) and a ratio (%) of undesirable spark to the weld portion; and

Figs. 7A, 7B, 8A to 8C show modifications of this embodiment.

The same or corresponding elements or parts are designated with like references throughout the drawings.

#### 25 DETAILED DESCRIPTION OF THE INVENTION

The spark plug according to this embodiment is used for a gas